

of Mexican data are now communicated in manuscript, in advance of their publication in the *Boletín Mensual*; an abstract translated into English measures is here given in continuation of the similar tables published in the MONTHLY WEATHER REVIEW since 1896. The barometric means have not been reduced to standard gravity, but this correction will be given at some future date when the pressures are published on our Chart IV.

Mexican data for November, 1898.

Stations.	Altitude.	Mean barometer.	Temperature.			Relative humidity.	Precipitation.	Prevailing direction.	
			Max.	Min.	Mean.			Wind.	Cloud.
Leon (Guanajuato)...	5,934	24.30	76.3	34.9	60.6	58	1.14	nnw.	sw.
Linares (New Leon)...	1,188	28.78	83.3	42.8	61.5	73	1.79	n.	n.
Mazatlan.....	35	29.90	85.1	63.7	70.5	83	0.57	nw.	sw.
Merida (Yucatan)....	50	29.91	85.4	61.7	76.5	83	4.49	e.	e.
Mexico (Obs. Cent.)...	7,472	23.06	72.5	36.5	57.5	97	1.23	nw.	sw.
Morelia (Seminario)...	6,401	23.97	74.1	41.4	59.5	75	0.46	sw.	sw.
Oaxaca.....	5,164	25.07	83.7	42.8	67.1	52	0.08	nw.	ne.
Puebla (Col. Cat.)....	7,112	23.36	77.0	32.5	59.7	53	3.48	ene.	e.
Tuxpan (Vera Cruz)....	30.26	22.51	89.6	52.3	70.7	81	1.44	nw.	s.
Zacatecas.....	8,015	22.51	77.4	34.3	55.8	59	0.56	sw.	e.
Zapotlan.....	5,078	22.51	78.3	49.3	61.9	79	0.61	se.	sw.

DECEMBER, 1898.

	Feet.	Inch.	° F.	° F.	° F.	%	Inch.		
Durango (Seminario)	6,043	23.43	73.4	32.0	56.3	49	0.18	.....	w.
Leon (Guanajuato)...	5,934	24.33	73.8	30.9	56.3	49	0.21	ssw.	sw.
Merida (Yucatan)....	50	30.02	95.2	56.8	73.6	79	6.21	o	n.
Mexico (Obs. Cent.)...	7,472	23.08	70.3	36.9	54.5	60	0.05	nw.	sw.
Morelia (Seminario)...	6,401	24.00	73.0	39.0	55.8	62	0.07	ssw.	w.
Oaxaca.....	5,164	25.12	82.0	38.1	63.0	57	1.41	nw.	sw.
Puebla (Col. Cat.)....	7,112	23.39	73.4	32.9	56.3	70	0.39	ene.	se., sse.
San Isidro.....	.....	.....	67.1	50.9	.....	.....	0.13	w.	.....
Tuxpan (Vera Cruz)....	30.21	22.51	97.2	46.4	63.3	81	1.44	nw.	s.
Zapotlan (Seminario)	5,078	25.14	77.4	41.7	61.5	77	0.01	sse.	sw.

METEOROLOGICAL OBSERVATIONS NEAR CIRCLE CITY, ALASKA.

By J. O. Holt.

Mr. J. O. Holt, formerly a voluntary observer of the Weather Bureau, has kindly furnished a copy of meteorological observations made by him in the Birch Creek Mining District, Alaska, from December, 1896, to June, 1898, inclusive. Mr. Holt's remarks in connection with the observations and his sojourn in Alaska are as follows:

These observations were taken about 75 miles south of Circle City in the mountains at headwaters of Birch Creek. I consider them of value for this reason, that during the colder parts of winter the thermometer stands from 15° to 20° higher here in the mountains than down on the flats, at Circle City, or at any point along the Yukon River. But in summer the thermometer stands highest in the lowlands. These are facts that every old timer has noticed, but I have never heard a satisfactory explanation for them. Of course our coldest weather is perfectly quiet, and as there is much more wind in the gulches than on the flats that is certainly one of the factors. I have seen the temperature run up 30° in 3 hours at the beginning of a wind, and run down as quickly when the wind stopped blowing.

During March, 1897, when the temperature was -42° at the mines it was -65° at Circle City, down on the Yukon, 75 miles away. The divergence became less as the temperature rose toward zero.

The fact that interior Alaska is as dry as eastern Washington is hard to believe even by one who has spent years in the country. For eight months everything is buried under snow, and for the other four the country is covered with lakes, sloughs, swamps and soggy moss reaching to the very mountain tops, yet the annual rainfall is only 12 or 13 inches.

The two winters which these records cover were, from all reports, very mild ones for this locality.

Observations in the interior of Alaska during the short summer have an important bearing upon the agricultural possibilities of that region. Besides the observations made by Mr. Holt only two other series are known to extend throughout the summer season, viz, that of the United States Coast Survey at Camp Davidson (see MONTHLY WEATHER REVIEW

June, 1897, p. 248), and that by Mr. Wm. Ogilvie, Land Surveyor of the Dominion of Canada (see the Scottish Geographical Magazine, Vol. XIV, No. 7). A summary of Mr. Ogilvie's observations appears in the MONTHLY WEATHER REVIEW of June, 1898, pp. 253-254.

It is quite possible that the mountainous country, where the observations above referred to were made, is not adapted to the purposes of agriculture. The minimum temperatures in summer, however, give us some idea of the conditions which must prevail at lower altitudes and nearer the coast. Mr. Holt's observations have been summarized in the Division of Records and Meteorological Data, and the results are given in the table following.

In June, 1897, the temperature fell to 40° or below on three days; in July on but one day; in August on fifteen days, and the minimum temperature was 40° or below continuously from the 18th of August to the 31st. In June, 1898, the temperature fell to 40° or below on four days. At Camp Davidson, the site occupied by the United States Coast Survey party of 1889-90, the temperature in June fell to 40° or below on twelve days, and the minimum of the month was 29.8° on June 27; in July the temperature fell to 40° or below on five days; in August on eleven days.

It would seem from the above that frost and freezing temperatures are to be expected in the latter part of August, and that there is indeed a possibility of frost in every month of the summer season.

Observations at Circle City (near), Alaska.

Latitude, 65° 30' north; longitude, 144° — west.

MEAN MAXIMUM TEMPERATURE.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1896.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8.6*
1897.....	-4.3	-8.5	3.5	27.6	43.3	65.5	63.3	56.7	33.3	19.3	6.1	5.0
1898.....	-0.2	-7.6	25.4	34.0	46.2	67.0	.....	.....	.....	.....	.....	.....

MEAN MINIMUM TEMPERATURE.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1896.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	-14.6*
1897.....	-9.3	-9.1	-13.2	18.1	28.7	50.4	50.0	40.6	22.8	6.4	-0.3	-1.9
1898.....	-6.2	-14.8	13.9	18.4	30.4	49.0	.....	.....	.....	.....	.....	.....

ABSOLUTE MAXIMUM TEMPERATURE.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1896.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9*
1897.....	22	28	29	38	59	84	83	70	52	38	28	28
1898.....	23	24	38	49	78	84	.....	.....	.....	.....	.....	.....

ABSOLUTE MINIMUM TEMPERATURE.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1896.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	-34*
1897.....	-31	-25	-42	-8	8	34	40	26	2	-12	-21	-18
1898.....	-31	-38	0	4	6	32	.....	.....	.....	.....	.....	.....

MEAN TEMPERATURE.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1896.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	-11.6*
1897.....	-6.8 ^b	-6.3	-4.8	20.4 ^c	36.0	58.0 ^d	56.6	48.6	28.0 ^e	12.8	2.9	1.6 ^f
1898.....	-3.2	-11.2	19.6	26.3 ^g	38.3	58.0	.....	.....	.....	.....	.....	.....

TOTAL RAIN AND MELTED SNOW.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1897.....	1.65	0.10	h	1.10	1.45	0.70 ⁱ	2.30	1.65	1.50	1.15	0.10	0.40
1898.....	0.20	0.40	1.60	0.75	0.75	0.29	.....	.....	.....	.....	.....	.....

TOTAL SNOWFALL.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1896.....	16.5	1.0	.....	11.0	12.5	0.00 ^k	0.00	0.00	15.5	11.5	1.0	4.0
1897.....	2.0	1.0	16.0	7.5	2.5	0.00	.....	.....	.....	.....	.....	.....

* Fourteen days missing. ^b Great irregularity in range caused by starting or stopping of wind. ^c Mean temperature above freezing April 11. ^d Flowers blooming in profusion. ^e On 19th the temperature fell below freezing and remained there. ^f South wind always raises temperature, which falls when wind stops blowing. ^g General average rose above freezing for the first time April 13. ^h Precipitation was something less than one inch during month. ⁱ Considerable thunder but little rain. ^j Snow all gone by 10th.